



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,938	03/31/2004	Avaneesh Dubey	11884/413901	4923
23838	7590	11/01/2007		
KENYON & KENYON LLP 1500 K STREET N.W. SUITE 700 WASHINGTON, DC 20005			EXAMINER WANG, BEN C	
			ART UNIT 2192	PAPER NUMBER
			MAIL DATE 11/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/812,938

Applicant(s)

DUBEY ET AL.

Examiner

Ben C. Wang

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s).

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's amendment dated August 15, 2007, responding to the Office action mailed May 15, 2007 provided in the rejection of claims 1-15, wherein claims 1, 3, 7, and 9.

Claims 1-15 remain pending in the application and which have been fully considered by the examiner.

Applicant's arguments with respect to claims rejection have been fully considered but are moot in view of the new grounds of rejection – see *Kumaran et al.* - art made of record, as applied hereto.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2192

Claim Rejections – 35 USC § 102(e)

The following is quotation of 35 U.S.C. 102(e) which form the basis for all obviousness rejections set forth in this office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kumaran et al., (Pub. No. US 2003/0187743 A1) (hereinafter 'Kumaran' - art made of record).

3. **As to claim 1** (Currently Amended), Kumaran discloses a method comprising:

- (i) defining, in configuration data of a computer system, a business process in terms of what activities the business process comprises (e.g., [0023] – All the definitions, including the processes, the state machine, business rules for state transition, the commands, and the receivers are specified using XML; The system reads in the XML files and does the appropriate internal configurations; This leads to a dynamic, adaptive and flexible system; [0018] – Solution design begins with laying out the information model, the organization model, and the business process model; Using the processing rules associated with these business events, we identify the commands that need to be executed as part of state transitions; When processing rules dictate collaboration with user or software agents in the system, we use macro flows to define them; We use activity controllers to define the micro flow used to

Art Unit: 2192

complete these activities; Activity controllers are designed and defined the same way as ADOC controllers are handled; We use a state machine to model their behavior and use commands to effect the behavior); and

- (ii) defining a behavior of each activity of the business process (e.g., [0018], Lines 16-17 – We use a state machine to model their behavior and use commands to effect the behavior; [0082] – The controller defines the dynamic behavior of the ADOC; [0175], Lines 2-5 – By defining an ADOC, we are defining the collaborative behavior that ADOC encapsulates; The behavior of the ADOC is defined using a state machine combined with command design pattern) with respect to a business object acted on by the business activity, for a plurality of process control elements (e.g., Abstract, Lines 3-7 – PBS (Process Brokering Services) provides a single point of process control over the various fragmented execution flows and brings together the elements for process integration in a unified, scalable architecture on an industry standard platform) including:
 - a status element, which represents a progress level within the business process that the data object has reached by arriving at the instant activity (Fig. 4, elements 41 – state, 42 – transition, 43 – event/action; [0017] – Assembling the integrated user experience through sequencing of ADOC views that render role-based content driven by application/process/user events and ensuring invocation of dynamic ADOC business services; [0019], Lines 11-13 – The client can trigger any service by raising an event against a specific ADOC instance; [0020], Lines 1-2 – The PBS interface redirects a business event from a client to the

appropriate ADOC; [0013] – Composing the relevant Adaptive Documents (ADOCs) for business collaboration which involves specifying the valid application states for the aggregated content and the business rules for orchestrating the state transitions);

- a user interface element, which allows users to operate on the data object within a defined scope of the instant activity (e.g., [0058] – The Flow Composition Builder serves as the build time tool for the BFM. The Flow Composition Builder is used to build micro-flows; Fig. 2 – The PBS Architecture, element 204 – PBS Interface; [0019] – The dynamic services provided by PBS are accessible to clients through a single PBS interface; Fig. 3 – A Conceptual View of ADOC, element 36 – Role-Based Web UI);
- a plausibility check element, which verifies that the data object sufficiently meets a set of criteria to proceed past the instant activity (e.g., [0020] – The ADOC controller acts on the business event based on its state and the event content; As part of this action, based on business rules attached to the ADOC.; [0023] – All the definitions, including the processes, the state machine, business rules for state transition, the commands, and the receivers are specified using XML; The system reads in the XML files and does the appropriate internal configurations; This leads to a dynamic, adaptive and flexible system);
- a release element, which signals that the data object is ready to proceed past the instant activity in the business process (e.g., [0013] – Composing the relevant Adaptive Documents (ADOCs) for business collaboration which involves

- specifying the valid application states for the aggregated content and the business rules for orchestrating the state transitions; [[0018], Lines 6-8 – Using the processing rules associated with these business events, we identify the commands that need to be executed as part of state transitions; [0023], All the definitions, including the processes, the state machine, business rules for state transition ...; [0080] – The state transitions are transactional), and
- an authorization element, which specifies a set of users that is allowed to operate on the data object for the instant activity (e.g., Abstract, Lines 7-13 – The two principal functions of the PBS (Process Brokering Services) are brokering of multiple business processes encapsulated in various back-end system including work flow engines and business applications, and aggregating content from multiple enterprise information systems in the business context and managing the shared access to this based on the roles of the participants; [0071] – enabling collaboration among appropriate role players in the business context using the information and the tools that are aggregated and shard by the ADOC (Adaptive Document)); and
 - (iii) storing the defined business process and activity behaviors in configuration data of the computer system, allowing the computer system to thereafter dynamically generate the business process to operate on business objects managed by the computer system (e.g., [0022], Lines 10-12 – The activity controllers that are dynamically bound to the ADOC act on these events much like the ADOC controller does; [0072] – The ADOC facilitates the collaborative experience outline about by

Art Unit: 2192

dynamically exposing a set of business services based on who you are (i.e., role) and where you are in the process (i.e., process context); [0083] – The Process Broker should facilitate dynamic e-business systems, in which the service providers for the individual commands in the controller can be dynamically mapped; [0061] – The Process Brokering Service allows PBS clients to invoke dynamic business services that are made available based on the business state of The ADOC – the services are dynamic because they are state dependent, i.e., the available set of services vary with any change in the business state of the ADOC instances).

4. **As to claim 2** (incorporating the rejection in claim 1) (Original), Kumaran discloses the method further comprising performing an activity of the business process in accordance with a corresponding defined behavior (e.g., [0022], Lines 10-12 – The activity controllers that are dynamically bound to the ADOC act on these events much like the ADOC controller does; [0072] – The ADOC facilitates the collaborative experience outline about by dynamically exposing a set of business services based on who you are (i.e., role) and where you are in the process (i.e., process context); [0083] – The Process Broker should facilitate dynamic e-business systems, in which the service providers for the individual commands in the controller can be dynamically mapped; [0061] – The Process Brokering Service allows PBS clients to invoke dynamic business services that are made available based on the business state of The ADOC – the services are dynamic because they are state dependent, i.e., the available set of services vary with any change in the business state of the ADOC instances).

5. **As to claim 3** (Currently Amended), Kumaran discloses a system comprising:

- a processor;
- a memory coupled to the processor and storing instructions executable by the processor to configure business application software, the instructions implementing a method including:
 - presenting an option to define a business process in terms of what activities the business process comprises;
 - based on user input, setting values in configuration data corresponding to a defined process (e.g., [0023] – All the definitions, including the processes, the state machine, business rules for state transition, the commands, and the receivers are specified using XML; The system reads in the XML files and does the appropriate internal configurations; This leads to a dynamic, adaptive and flexible system; [0018] – Solution design begins with laying out the information model, the organization model, and the business process model; Using the processing rules associated with these business events, we identify the commands that need to be executed as part of state transitions; When processing rules dictate collaboration with user or software agents in the system, we use macro flows to define them; We use activity controllers to define the micro flow used to complete these activities; Activity controllers are designed and defined the same way as ADOC controllers are handled; We use a state machine to model their behavior and use commands to effect the behavior);

- presenting an option to define a behavior of each activity of the business process (e.g., [0018], Lines 16-17 – We use a state machine to model their behavior and use commands to effect the behavior; [0082] – The controller defines the dynamic behavior of the ADOC; [0175], Lines 2-5 – By defining an ADOC, we are defining the collaborative behavior that ADOC encapsulates; The behavior of the ADOC is defined using a state machine combined with command design pattern) with respect to a business object for each of a plurality of process control elements (e.g., Abstract, Lines 3-7 – PBS (Process Brokering Services) provides a single point of process control over the various fragmented execution flows and brings together the elements for process integration in a unified, scalable architecture on an industry standard platform) including:
 - a status element, which represents a progress level within the business process that the data object has reached by arriving at the instant activity (Fig. 4, elements 41 – state, 42 – transition, 43 – event/action; [0017] – Assembling the integrated user experience through sequencing of ADOC views that render role-based content driven by application/process/user events and ensuring invocation of dynamic ADOC business services; [0019], Lines 11-13 – The client can trigger any service by raising an event against a specific ADOC instance; [0020], Lines 1-2 – The PBS interface redirects a business event from a client to the appropriate ADOC; [0013] – Composing the relevant Adaptive Documents (ADOCs) for business collaboration which

involves specifying the valid application states for the aggregated content and the business rules for orchestrating the state transitions);

- a user interface element, which allows users to operate on the data object within a defined scope of the instant activity (e.g., [0058] – The Flow Composition Builder serves as the build time tool for the BFM. The Flow Composition Builder is used to build micro-flows; Fig. 2 – The PBS Architecture, element 204 – PBS Interface; [0019] – The dynamic services provided by PBS are accessible to clients through a single PBS interface; Fig. 3 – A Conceptual View of ADOC, element 36 – Role-Based Web UI);
- a plausibility check element, which verifies that the data object sufficiently meets a set of criteria to proceed past the instant activity (e.g., [0020] – The ADOC controller acts on the business event based on its state and the event content; As part of this action, based on business rules attached to the ADOC.; [0023] – All the definitions, including the processes, the state machine, business rules for state transition, the commands, and the receivers are specified using XML; The system reads in the XML files and does the appropriate internal configurations; This leads to a dynamic, adaptive and flexible system);
- a release element, which signals that the data object is ready to proceed past the instant activity in the business process (e.g., [0013] – Composing the relevant Adaptive Documents (ADOCs) for business collaboration which involves specifying the valid application states for the aggregated content and

Art Unit: 2192

- the business rules for orchestrating the state transitions; [[0018], Lines 6-8 – Using the processing rules associated with these business events, we identify the commands that need to be executed as part of state transitions; [0023], All the definitions, including the processes, the state machine, business rules for state transition ...; [0080] – The state transitions are transactional), and
- an authorization element, which specifies a set of users that is allowed to operate on the data object for the instant activity (e.g., Abstract, Lines 7-13 – The two principal functions of the PBS (Process Brokering Services) are brokering of multiple business processes encapsulated in various back-end system including work flow engines and business applications, and aggregating content from multiple enterprise information systems in the business context and managing the shared access to this based on the roles of the participants; [0071] – enabling collaboration among appropriate role players in the business context using the information and the tools that are aggregated and shard by the ADOC (Adaptive Document)); and
 - based on user input, setting values in the configuration data corresponding to the defined business process and activity behaviors in configuration data of the computer system, allowing the computer system to thereafter dynamically generate the business process to operate on business objects managed by the computer system (e.g., [0022], Lines 10-12 – The activity controllers that are dynamically bound to the ADOC act on these events much like the ADOC controller does; [0072] – The ADOC facilitates the collaborative experience

Art Unit: 2192

outline about by dynamically exposing a set of business services based on who you are (i.e., role) and where you are in the process (i.e., process context); [0083] – The Process Broker should facilitate dynamic e-business systems, in which the service providers for the individual commands in the controller can be dynamically mapped; [0061] – The Process Brokering Service allows PBS clients to invoke dynamic business services that are made available based on the business state of The ADOC – the services are dynamic because they are state dependent, i.e., the available set of services vary with any change in the business state of the ADOC instances).

6. **As to claim 4** (incorporating the rejection in claim 3) (Original), Kumaran discloses the system the method further comprising performing the business process or an activity thereof in accordance with the configuration data (e.g., [0022], Lines 10-12 – The activity controllers that are dynamically bound to the ADOC act on these events much like the ADOC controller does; [0072] – The ADOC facilitates the collaborative experience outline about by dynamically exposing a set of business services based on who you are (i.e., role) and where you are in the process (i.e., process context); [0083] – The Process Broker should facilitate dynamic e-business systems, in which the service providers for the individual commands in the controller can be dynamically mapped; [0061] – The Process Brokering Service allows PBS clients to invoke dynamic business services that are made available based on the business state of The ADOC –

Art Unit: 2192

the services are dynamic because they are state dependent, i.e., the available set of services vary with any change in the business state of the ADOC instances).

7. **As to claim 5** (incorporating the rejection in claim 3) (Original), Kumaran discloses the system the method further comprising associating respective configuration values with retrieval parameters (e.g., Fig. 2 – The PBS Architecture, element 206 – ADOC Query; [0019], Lines 15-21 – The ADOC Query Service allows PBS client to query the business state of the ADOC, ascertain the available business services for a given business state, access the business content aggregated by the ADOC, and query for navigational purposes such as list of ADOCs that satisfy a given criteria; [0055] – The WWFS base component is primarily used as an interface to the workflow engine such as MQ Workflow; It logs a user to the workflow engine and provides the necessary interfaces for PBS to launch a process, claim an activity, update the activity status upon completion, and query the process and activity details).

8. **As to claim 6** (incorporating the rejection in claim 5) (Original), Kumaran discloses the system the method further comprising reading configuration values based on the retrieval parameters (e.g., Fig. 2 – The PBS Architecture, element 206 – ADOC Query; [0019], Lines 15-21 – The ADOC Query Service allows PBS client to query the business state of the ADOC, ascertain the available business services for a given business state, access the business content aggregated by the ADOC, and query for navigational purposes such as list of ADOCs that satisfy a given criteria; [0055] – The

Art Unit: 2192

WWFS base component is primarily used as an interface to the workflow engine such as MQ Workflow; It logs a user to the workflow engine and provides the necessary interfaces for PBS to launch a process, claim an activity, update the activity status upon completion, and query the process and activity details), and controlling a behavior of the business process or an activity thereof based on the configuration values ([0061] – The Process Brokering Service allows PBS clients to invoke dynamic business services that are made available based on the business state of The ADOC – the services are dynamic because they are state dependent, i.e., the available set of services vary with any change in the business state of the ADOC instances).

9. **As to claim 7** (Currently Amended), Kumaran discloses a machine-readable medium storing computer-executable instructions to perform a method comprising:

- presenting an option to define a business process in terms of what activities the business process comprises;
- based on user input, setting values in configuration data corresponding to a defined process (e.g., [0023] – All the definitions, including the processes, the state machine, business rules for state transition, the commands, and the receivers are specified using XML; The system reads in the XML files and does the appropriate internal configurations; This leads to a dynamic, adaptive and flexible system; [0018] – Solution design begins with laying out the information model, the organization model, and the business process model; Using the processing rules associated with these business events, we identify the commands that need to be executed as part

of state transitions; When processing rules dictate collaboration with user or software agents in the system, we use macro flows to define them; We use activity controllers to define the micro flow used to complete these activities; Activity controllers are designed and defined the same way as ADOC controllers are handled; We use a state machine to model their behavior and use commands to effect the behavior);

- presenting an option to define a behavior of each activity of the business process (e.g., [0018], Lines 16-17 – We use a state machine to model their behavior and use commands to effect the behavior; [0082] – The controller defines the dynamic behavior of the ADOC; [0175], Lines 2-5 – By defining an ADOC, we are defining the collaborative behavior that ADOC encapsulates; The behavior of the ADOC is defined using a state machine combined with command design pattern) with respect to a business object for each of a plurality of process control elements (e.g., Abstract, Lines 3-7 – PBS (Process Brokering Services) provides a single point of process control over the various fragmented execution flows and brings together the elements for process integration in a unified, scalable architecture on an industry standard platform) including:

- a status element, which represents a progress level within the business process that the data object has reached by arriving at the instant activity (Fig. 4, elements 41 – state, 42 – transition, 43 – event/action; [0017] – Assembling the integrated user experience through sequencing of ADOC views that render role-based content driven by application/process/user

events and ensuring invocation of dynamic ADOC business services; [0019],

Lines 11-13 – The client can trigger any service by raising an event against a

specific ADOC instance; [0020], Lines 1-2 – The PBS interface redirects a

business event from a client to the appropriate ADOC; [0013] – Composing

the relevant Adaptive Documents (ADOCs) for business collaboration which

involves specifying the valid application states for the aggregated content and

the business rules for orchestrating the state transitions);

- a user interface element, which allows users to operate on the data object within a defined scope of the instant activity (e.g., [0058] – The Flow Composition Builder serves as the build time tool for the BFM. The Flow Composition Builder is used to build micro-flows; Fig. 2 – The PBS Architecture, element 204 – PBS Interface; [0019] – The dynamic services provided by PBS are accessible to clients through a single PBS interface; Fig. 3 – A Conceptual View of ADOC, element 36 – Role-Based Web UI);
- a plausibility check element, which verifies that the data object sufficiently meets a set of criteria to proceed past the instant activity e.g., [0020] – The ADOC controller acts on the business event based on its state and the event content; As part of this action, based on business rules attached to the ADOC.; [0023] – All the definitions, including the processes, the state machine, business rules for state transition, the commands, and the receivers are specified using XML; The system reads in the XML files and does the

appropriate internal configurations; This leads to a dynamic, adaptive and flexible system);

- a release element, which signals that the data object is ready to proceed past the instant activity in the business process (e.g., [0013] – Composing the relevant Adaptive Documents (ADOCs) for business collaboration which involves specifying the valid application states for the aggregated content and the business rules for orchestrating the state transitions; [[0018], Lines 6-8 – Using the processing rules associated with these business events, we identify the commands that need to be executed as part of state transitions; [0023], All the definitions, including the processes, the state machine, business rules for state transition ...; [0080] – The state transitions are transactional), and
- an authorization element, which specifies a set of users that is allowed to operate on the data object for the instant activity (e.g., Abstract, Lines 7-13 – The two principal functions of the PBS (Process Brokering Services) are brokering of multiple business processes encapsulated in various back-end system including work flow engines and business applications, and aggregating content from multiple enterprise information systems in the business context and managing the shared access to this based on the roles of the participants; [0071] – enabling collaboration among appropriate role players in the business context using the information and the tools that are aggregated and shard by the ADOC (Adaptive Document)); and

Art Unit: 2192

- based on user input, setting values in the configuration data corresponding to the defined business process and activity behaviors in configuration data of the computer system, allowing the computer system to thereafter dynamically generate the business process to operate on business objects managed by the computer system (e.g., [0022], Lines 10-12 – The activity controllers that are dynamically bound to the ADOC act on these events much like the ADOC controller does; [0072] – The ADOC facilitates the collaborative experience outline about by dynamically exposing a set of business services based on who you are (i.e., role) and where you are in the process (i.e., process context); [0083] – The Process Broker should facilitate dynamic e-business systems, in which the service providers for the individual commands in the controller can be dynamically mapped; [0061] – The Process Brokering Service allows PBS clients to invoke dynamic business services that are made available based on the business state of The ADOC – the services are dynamic because they are state dependent, i.e., the available set of services vary with any change in the business state of the ADOC instances).

10. **As to claim 8** (incorporating the rejection in claim 7) (Original), please refer to claim 5 as set forth above accordingly.

11. **As to claim 9** (Currently Amended), Kumaran discloses a method comprising: reading configuration data to determine a behavior of a business activity with respect to

Art Unit: 2192

a business object (e.g., [0023] – All the definitions, including the processes, the state machine, business rules for state transition, the commands, and the receivers are specified using XML; The system reads in the XML files and does the appropriate internal configurations; This leads to a dynamic, adaptive and flexible system; [0018] – Solution design begins with laying out the information model, the organization model, and the business process model; Using the processing rules associated with these business events, we identify the commands that need to be executed as part of state transitions; When processing rules dictate collaboration with user or software agents in the system, we use macro flows to define them; We use activity controllers to define the micro flow used to complete these activities; Activity controllers are designed and defined the same way as ADOC controllers are handled; We use a state machine to model their behavior and use commands to effect the behavior), wherein the behavior is defined in the configuration data (e.g., [0018], Lines 16-17 – We use a state machine to model their behavior and use commands to effect the behavior; [0082] – The controller defines the dynamic behavior of the ADOC; [0175], Lines 2-5 – By defining an ADOC, we are defining the collaborative behavior that ADOC encapsulates; The behavior of the ADOC is defined using a state machine combined with command design pattern) in accordance with a plurality of process control elements (e.g., Abstract, Lines 3-7 – PBS (Process Brokering Services) provides a single point of process control over the various fragmented execution flows and brings together the elements for process integration in a unified, scalable architecture on an industry standard platform) including:

- a status element, which represents a progress level within the business process that the data object has reached by arriving at the instant activity (Fig. 4, elements 41 – state, 42 – transition, 43 – event/action; [0017] – Assembling the integrated user experience through sequencing of ADOC views that render role-based content driven by application/process/user events and ensuring invocation of dynamic ADOC business services; [0019], Lines 11-13 – The client can trigger any service by raising an event against a specific ADOC instance; [0020], Lines 1-2 – The PBS interface redirects a business event from a client to the appropriate ADOC; [0013] – Composing the relevant Adaptive Documents (ADOCs) for business collaboration which involves specifying the valid application states for the aggregated content and the business rules for orchestrating the state transitions);
- a user interface element, which allows users to operate on the data object within a defined scope of the instant activity (e.g., [0058] – The Flow Composition Builder serves as the build time tool for the BFM. The Flow Composition Builder is used to build micro-flows; Fig. 2 – The PBS Architecture, element 204 – PBS Interface; [0019] – The dynamic services provided by PBS are accessible to clients through a single PBS interface; Fig. 3 – A Conceptual View of ADOC, element 36 – Role-Based Web UI);
- a plausibility check element, which verifies that the data object sufficiently meets a set of criteria to proceed past the instant activity (e.g., [0020] – The ADOC controller acts on the business event based on its state and the event content; As

Art Unit: 2192

part of this action, based on business rules attached to the ADOC.; [0023] – All the definitions, including the processes, the state machine, business rules for state transition, the commands, and the receivers are specified using XML; The system reads in the XML files and does the appropriate internal configurations; This leads to a dynamic, adaptive and flexible system);

- a release element, which signals that the data object is ready to proceed past the instant activity in the business process (e.g., [0013] – Composing the relevant Adaptive Documents (ADOCs) for business collaboration which involves specifying the valid application states for the aggregated content and the business rules for orchestrating the state transitions; [[0018], Lines 6-8 – Using the processing rules associated with these business events, we identify the commands that need to be executed as part of state transitions; [0023], All the definitions, including the processes, the state machine, business rules for state transition ...; [0080] – The state transitions are transactional), and
- an authorization element, which specifies a set of users that is allowed to operate on the data object for the instant activity (e.g., Abstract, Lines 7-13 – The two principal functions of the PBS (Process Brokering Services) are brokering of multiple business processes encapsulated in various back-end system including work flow engines and business applications, and aggregating content from multiple enterprise information systems in the business context and managing the shared access to this based on the roles of the participants; [0071] – enabling collaboration among appropriate role players in the business context using the

Art Unit: 2192

information and the tools that are aggregated and shard by the ADOC (Adaptive Document)); and

- performing the business activity in accordance with the configuration data (e.g., [0022], Lines 10-12 – The activity controllers that are dynamically bound to the ADOC act on these events much like the ADOC controller does; [0072] – The ADOC facilitates the collaborative experience outline about by dynamically exposing a set of business services based on who you are (i.e., role) and where you are in the process (i.e., process context); [0083] – The Process Broker should facilitate dynamic e-business systems, in which the service providers for the individual commands in the controller can be dynamically mapped; [0061] – The Process Brokering Service allows PBS clients to invoke dynamic business services that are made available based on the business state of The ADOC – the services are dynamic because they are state dependent, i.e., the available set of services vary with any change in the business state of the ADOC instances).

12. **As to claim 10** (incorporating the rejection in claim 9) (Original), Kumaran discloses the method wherein values in the configuration data corresponding to the business activity are read based on a retrieval parameter corresponding to a process control area of the business activity (e.g., Fig. 2 – The PBS Architecture, element 206 – ADOC Query; [0019], Lines 15-21 – The ADOC Query Service allows PBS client to query the business state of the ADOC, ascertain the available business services for a given business state, access the business content aggregated by the ADOC, and query

Art Unit: 2192

for navigational purposes such as list of ADOCs that satisfy a given criteria; [0055] –

The WWFS base component is primarily used as an interface to the workflow engine such as MQ Workflow; It logs a user to the workflow engine and provides the necessary interfaces for PBS to launch a process, claim an activity, update the activity status upon completion, and query the process and activity details).

13. **As to claim 11** (incorporating the rejection in claim 9) (Original), Kumaran discloses the method wherein the status element relates to a stage of a business process that includes the business activity (Fig. 4, elements 41 – state, 42 – transition, 43 – event/action; [0017] – Assembling the integrated user experience through sequencing of ADOC views that render role-based content driven by application/process/user events and ensuring invocation of dynamic ADOC business services; [0019], Lines 11-13 – The client can trigger any service by raising an event against a specific ADOC instance; [0020], Lines 1-2 – The PBS interface redirects a business event from a client to the appropriate ADOC; [0013] – Composing the relevant Adaptive Documents (ADOCs) for business collaboration which involves specifying the valid application states for the aggregated content and the business rules for orchestrating the state transitions).

14. **As to claim 12** (incorporating the rejection in claim 9) (Original), Kumaran discloses the method wherein the user interface element relates to at least one of an appearance and operability of a user interface for handling the business object (e.g.,

Art Unit: 2192

[0058] – The Flow Composition Builder serves as the build time tool for the BFM. The Flow Composition Builder is used to build micro-flows; Fig. 2 – The PBS Architecture, element 204 – PBS Interface; [0019] – The dynamic services provided by PBS are accessible to clients through a single PBS interface; Fig. 3 – A Conceptual View of ADOC, element 36 – Role-Based Web UI).

15. **As to claim 13** (incorporating the rejection in claim 9) (Original), Kumaran discloses the method wherein the plausibility check element relates to plausibility checks on data relating to the business object (e.g., [0020] – The ADOC controller acts on the business event based on its state and the event content; As part of this action, based on business rules attached to the ADOC.; [0023] – All the definitions, including the processes, the state machine, business rules for state transition, the commands, and the receivers are specified using XML; The system reads in the XML files and does the appropriate internal configurations; This leads to a dynamic, adaptive and flexible system).

16. **As to claim 14** (incorporating the rejection in claim 9) (Original), Kumaran discloses the method wherein the release element relates to an approval for the business object to be acted on by a subsequent activity (e.g., [0013] – Composing the relevant Adaptive Documents (ADOCs) for business collaboration which involves specifying the valid application states for the aggregated content and the business rules for orchestrating the state transitions; [[0018], Lines 6-8 – Using the processing rules

Art Unit: 2192

associated with these business events, we identify the commands that need to be executed as part of state transitions; [0023], All the definitions, including the processes, the state machine, business rules for state transition ...; [0080] – The state transitions are transactional).

17. **As to claim 15** (incorporating the rejection in claim 9) (Original), Kumaran discloses the method wherein the authorization element relates to an authorization to act on the business object (e.g., Abstract, Lines 7-13 – The two principal functions of the PBS (Process Brokering Services) are brokering of multiple business processes encapsulated in various back-end system including work flow engines and business applications, and aggregating content from multiple enterprise information systems in the business context and managing the shared access to this based on the roles of the participants; [0071] – enabling collaboration among appropriate role players in the business context using the information and the tools that are aggregated and shard by the ADOC (Adaptive Document)).

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- M. Blevins, Collaborative Business Plug-In Framework (Pub. No. US 2004/0221261 A1)

Art Unit: 2192

- M. K. Bowman-Amuah, System, Method and Article of Manufacture for A Persistent State and Persistent Object Separator In An Information Services Patterns Environment (Pat. No. US 6,442,748 B1)
- C. Sproule, System and Method for the Composition, Generation, Integration and Execution of Business Process over a Network (Pub. No. US 2004/0133876 A1)

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben C. Wang whose telephone number is 571-270-1240. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2192

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BCW

bw



TUAN DAM
SUPERVISORY PATENT EXAMINER

October 16, 2007